

PATENT

19. (Amended) The method of claim 18, wherein the AIB polypeptide further SEQ ID NO:2 or a conservative variant thereof.

20. (Amended) The method of claim 18, wherein the AIB polypeptide further comprises SEQ ID NO:3 or a conservative variant thereof.

21. (Amended) A method of screening a candidate compound which inhibits an interaction of a polypeptide comprising SEQ ID NO:8, or a conservative variant thereof, that acts as a co-activator of steroid hormone receptor, with an estrogen receptor polypeptide in a cell comprising:

(a) providing a cell comprising a GAL4 binding site linked to a reporter gene; a GAL4 binding domain linked to either the AIB polypeptide or the estrogen receptor polypeptide; and a GAL4 transactivation domain II linked to the ER polypeptide if the GAL4 binding domain is linked to the AIB1 polypeptide or linked to the AIB1 polypeptide if the GAL4 binding domain is linked to the ER polypeptide;

(b) contacting the cell with the compound; and

(c) monitoring expression of the reporter gene, wherein a decrease in expression of the reporter gene in the presence of the compound compared to expression of the reporter gene in the absence of the compound indicates that the compound inhibits an interaction of an AIB1 polypeptide with the ER polypeptide.

26. (Reiterated) The method of claim 21, wherein the AIB1 gene expression is measured using an AIB1 gene-specific polynucleotide probe.

27. (Reiterated) The method of claim 21, wherein the AIB1 gene expression is measured using an antibody specific for an AIB1 gene product.

55. (Amended) A substantially pure DNA comprising a sequence encoding a AIB1 polypeptide comprising SEQ ID NO:8, or a conservative variant thereof, wherein the polypeptide acts as co-activator of a steroid hormone receptor.

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56. (Amended) The DNA of claim 55, wherein the AIB1 polypeptide is a human AIB1 polypeptide.

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57. (Amended) The DNA of claim 55, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:4.

58. (Amended) The DNA of claim 55, wherein the polypeptide further comprises the amino acid sequence of SEQ ID NO:2.

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59. (Amended) The DNA of claim 55, wherein the AIB1 polypeptide further comprises the amino acid sequence of SEQ ID NO:3.

60. (Amended) The DNA of claim 55, wherein the AIB1 polypeptide comprises the amino acid sequence of SEQ ID NO:8.

61. (Amended) The DNA of claim 55 comprising a polynucleotide which hybridizes at high stringency to a DNA having the sequence of SEQ ID NO:1, or the complement thereof, wherein the polynucleotide has at least 90% sequence identity to SEQ ID NO:1.

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62. (Amended) The DNA of claim 55 comprising a polynucleotide sequence having at least 90% sequence identity to SEQ ID NO:1.

63. (Amended) The DNA of claim 55 comprising (a) the sequence of SEQ ID NO:1 or (b) a degenerate variant thereof.

64. (Amended) The DNA of claim 55, operably linked to a promoter.

65. (Amended) A host cell comprising the DNA of claim 55.

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Please add the following new claims:

- But 75
- 66. (New) A polypeptide comprising SEQ ID NO:2 or a conservative variant thereof.
67. (New) A polypeptide comprising SEQ ID NO:3 or a conservative variant thereof
68. (New) A polynucleotide having at least 75% homology to SEQ ID NO:1, wherein the polynucleotide encodes a polypeptide that acts as a co-activator of a steroid hormone receptor.
69. (New) A polynucleotide having at least 90% homology to SEQ ID NO:1, wherein the polynucleotide encodes a polypeptide that acts as a co-activator of a steroid hormone receptor --.

**In the specification:**

On page 1, line 2, please insert the following new paragraph:

**--PRIORITY CLAIM**

De This application claims priority under 35 U.S.C. § 119 to PCT Application No. PCT/US8912689, filed June 17, 1998, which claims priority to U.S. Provisional Application No. 60/049,728, filed June 17, 1997.--

Please delete the paragraphs describing the sequences beginning on page 4, line 26, and ending on page 5, line 9, and insert therefor:

De --SEQ ID NO:1 shows the nucleic acid sequence of AIB1 cDNA and the corresponding amino acid sequence.

SEQ ID NO:2 shows the amino acid sequence of the Per/Arnt/Sim (PAS) domain of AIB1.

SEQ ID NO:3 shows the amino acid sequence of the basic helix-loop-helix domain (bHLH) of AIB1.

SEQ ID NO:4 shows the amino acid sequence of the human AIB1 protein.

SEQ ID NO:5 shows the nucleic acid sequence of primer N8F1.

SEQ ID NO:6 show the nucleic acid sequence of the forward primer designed from the 5' sequence of pCMVSPORT-B11, PM-U2.

SEQ ID NO:7 shows the nucleic acid sequence of the reverse primer designed from the 5' sequence of pCMVSPORT-B11, PM-U2.